Claim Amendments

1-27. (Cancelled)

28. (Currently Amended) The autosampler of claim 45, wherein the autosampler is adapted to perform sample extractions from the specimen, and wherein the specimen comprises at least one of a soil sample and a water sample.

29. (Cancelled)

30. (Currently Amended) The autosampler of claim 45, further comprising:

a second flow path in line with the middle stage of the needle;

a solvent reservoir;

a multi-port valve in line with the second flow path;

a pumping means in line with the source of pressurized gas and the multi-port valve and adapted for withdrawing a solvent from the solvent reservoir and adding the solvent to the vial through the second flow path;

a third valve in line with the pumping means and the source of pressurized gas; and

the multi-port valve having at least a first position wherein the pumping means is in line with the solvent reservoir and a second position wherein the pumping means is in line with the second flow path and cut off from the solvent reservoir;

whereby withdrawal of the solvent from the solvent reservoir is facilitated by the multi-port valve being in the first position and the third valve being in ~~the~~ a closed position, addition of the solvent to the vial is facilitated by the multi-port valve being in the second position and the third valve

being in ~~the~~ an open position, and a static headspace gas extraction is facilitated by the multi-port valve being in the second position and the third valve being in the open position.

31. (Currently Amended) The autosampler of claim 30, wherein the solvent reservoir comprises at least one of water and methanol, and the specimen comprises a soil sample.

32. (Previously Presented) The autosampler of claim 30, further comprising:

a third flow path in line with the bottom stage of the needle; and

wherein the pumping means is further adapted for withdrawing a liquid sample from the vial;

wherein the multi-port valve further comprises a third position, wherein the third flow path is in line with the pumping means and the source of pressurized gas;

whereby a dynamic headspace gas extraction is facilitated by the multi-port valve being in the third position and the third valve being in the open position, and withdrawal of the liquid sample from the vial is facilitated by the multi-port valve being in the third position and the third valve being in the closed position.

33. (Previously Presented) The autosampler of claim 32, further comprising:

a second exit port in line with the second flow path;

a fourth valve in line with the second exit port; and

a fifth valve in line with the second flow path,

wherein the pumping means is further adapted for pumping the liquid sample to the second exit port,

whereby pumping the liquid sample to the second exit port is facilitated by the multi-port valve being in the second position, the third valve being in the open position, the fourth valve being in the open position and the fifth valve being in the closed position.

34. (Previously Presented) The autosampler of claim 33, further comprising:

a second solvent reservoir in line with the multi-port valve,

wherein the multi-port valve further comprises a fourth position, wherein the pumping means is in line with the second solvent reservoir;

whereby withdrawal of a second solvent from the second solvent reservoir is facilitated by the multi-port valve being in the fourth position and the third valve being in the closed position.

35. (Currently Amended) The autosampler of claim 34, wherein the second solvent reservoir comprises at least one of water and methanol.

36. (Previously Presented) The autosampler of claim 33, further comprising:

an internal standard injection means adapted to introduce a known quantity of at least one internal standard into at least one of the liquid sample and the vial;

wherein the internal standard injection means is in line with the second flow path.

37. (Previously Presented) The autosampler of claim 45 further comprising:

a third flow path in line with the bottom stage of the needle;

a pumping means in line with the source of pressurized gas and the third flow path and adapted for withdrawing a liquid sample from the vial; and

a third valve in line with the pumping means and the source of pressurized gas; whereby a dynamic headspace gas extraction is facilitated by the third valve being in the open position and withdrawal of the liquid sample from the vial is facilitated by the third valve being in the closed position.

38. (Previously Presented) The autosampler of claim 45, wherein the needle further includes a heated block adapted to heat a portion of at least one of the bottom stage, the middle stage, and the top stage of the needle.

39-44 (Cancelled)

45. (Currently Amended) A vial autosampler for performing both liquid and gas sample extractions from a specimen contained in a vial, the auto sampler comprising:

an exit port;

a needle adapted to inject and extract gas and liquid[[s]] from the vial, the needle comprising:

a bottom stage having at least one aperture and an end;

a middle stage, proximate to the bottom stage, having at least one aperture; and

a top stage, proximate to the bottom and middle stages, having at least one aperture~~, wherein the top stage of the needle is in line with the first flow path~~; and

a first flow path in line with the top stage of the needle; and

a first valve having an open position wherein the first flow path is in line with the exit port and a closed position wherein the first flow path is in line with a source of pressurized gas and cut off from the exit port.

46. (Previously Presented) A vial autosampler for performing both liquid and gas sample extractions from a specimen contained in a vial, the auto sampler comprising:

a needle assembly;

a first flow path in line with the needle assembly, wherein the autosampler has a first sampling configuration in which the first flow path is in line with an exit port, and a purge configuration in which the first flow path is in line with a source of pressurized gas; and

a second flow path in line with the needle assembly, wherein the autosampler has a second sampling configuration in which the second flow path is in fluid communication with a second exit port.

47. (Previously Presented) The vial autosampler of claim 46, further comprising a third flow path in line with the needle assembly, wherein the autosampler has a standard configuration in which the third flowpath is in line with a source of a standard.

48. (Previously Presented) The vial autosampler of claim 46, wherein the autosampler has a third sampling configuration in which a third flowpath is in line with the source of pressurized gas, and the first flowpath is in line with the exit port.

49. (Previously Presented) The vial autosampler of claim 46, wherein the needle assembly further includes a heated block adapted to heat a portion of at least one of the first flow path and the second flow path.

50. (Previously Presented) The vial autosampler of claim 46, wherein the second flow path is in line with the source of pressurized gas when the autosampler is in the first sampling configuration.

51. (Previously Presented) The vial autosampler of claim 46, wherein the second flowpath is in line with a pump when the autosampler is in the second sampling configuration.

52. (Previously Presented) The vial autosampler of claim 46, further comprising a third flow path, wherein the needle assembly comprises a needle, and wherein the first, second, and third flow paths are inline with at least one of a first, a second, and a third stage of the needle.

53. (Previously Presented) The vial autosampler of claim 52, wherein the first flow path is in line with a top stage of the needle, the second flow path is in line with a bottom stage of the needle, and the third flow path is in line with a middle stage of the needle.

54. (Previously Presented) The vial autosampler of claim 46, wherein the autosampler is configured to perform a dynamic gas headspace extraction when in the first sampling configuration.

55. (Previously Presented) The vial autosampler of claim 46, wherein the autosampler is configured to perform a fluid extraction when the autosampler is in the second sampling configuration.

56. (Previously Presented) The vial autosampler of claim 48, wherein the autosampler is configured to perform a static headspace extraction when the autosampler is in the third sampling configuration.

57. (Previously Presented) The vial autosampler of claim 46, further comprising means for extracting a fluid from the second flow path to the second exit port.